

**BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA**

DOCKET NO. 2018-3-E

In the Matter of:

Annual Review of Base Rates for Fuel
Costs for Duke Energy Carolinas, LLC

**SUPPLEMENTAL TESTIMONY OF
KIMBERLY D. MCGEE FOR
DUKE ENERGY CAROLINAS, LLC**

1 **Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

2 **A.** My name is Kimberly D. McGee and I am a Rates Manager supporting both Duke
3 Energy Carolinas, LLC (“DEC” or the “Company”) and Duke Energy Progress, LLC.
4 My address is 550 South Tryon Street, Charlotte, North Carolina.

5 **Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY AND REBUTTAL**
6 **TESTIMONY IN SUPPORT OF DEC’S APPLICATION IN THIS DOCKET?**

7 **A.** Yes, I did.

8 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?**

9 **A.** The purpose of my supplemental testimony is to support the stipulation entered into
10 between the South Carolina Energy Users Committee, the South Carolina Office of
11 Regulatory Staff (“ORS”), and the Company (collectively, the “Parties”) (the
12 “Stipulation”) and to agree to the billing factors that are included in the Stipulation and
13 the associated impact on customer rates.

14 **Q. PLEASE DESCRIBE THE STIPULATION AS IT RELATES TO THE**
15 **COMPANY’S DEFFERAL OF FUEL COST IN THIS PROCEEDING.**

16 **A.** The Stipulation limits the total average bill increase to all customer classes to no more
17 than 5 percent for the one year billing period beginning October 2018. As such, the
18 Company agrees to reduce projected fuel costs by \$34 million in order to limit the impact
19 on average customer bills during the billing period October 2018 through September
20 2019. In its 2019 fuel proceeding, the Company will propose to recover the actual
21 over/under recovery balance beginning October 1, 2019. The Company will charge and
22 accrue interest monthly on the amount the Company would have billed but for the
23 deferral. The applicable interest rate used to calculate the carrying costs will be the 3-year

1 U.S. Government Treasury Note, as reported in the Wall Street Journal, either in its
2 printed edition or on its website, plus an all-in spread of 65 basis points (0.65 percentage
3 points). The applicable period during which carrying costs will be applied begins October
4 1, 2018 and ends September 30, 2019.

5 **Q. HOW MUCH IS THE TOTAL DEFERRAL OF FUEL COSTS FOR ALL**
6 **CUSTOMERS OVER A TWO-YEAR RECOVERY PERIOD?**

7 **A.** To limit the rate impact to no more than 5 percent for any customer class would require
8 the deferral of \$34 million in fuel costs for all customers for one year. As a result, the
9 revised average bill increase percentages for each customer class will be: Residential –
10 2.9 percent, General Service – 3.2 percent, Lighting – 1.4 percent, Industrial – 5.0
11 percent.

12 **Q. PLEASE DESCRIBE THE EXHIBITS INCLUDED IN YOUR SUPPLEMENTAL**
13 **TESTIMONY.**

14 **A.** My testimony includes Revised Exhibits 1, 3, 9, and 11, which are the same as Exhibit 1,
15 Exhibit 3, Exhibit 9, and Exhibit 11 included in my direct testimony, but revised to
16 incorporate the impact of the Stipulation.

17 **Q. IN YOUR VIEW, IS THE STIPULATION REACHED BY THE PARTIES IN THE**
18 **PUBLIC INTEREST?**

19 **A.** Yes, the Parties believe the Stipulation represents a fair, reasonable and full resolution of all
20 issues in this proceeding. Further, the Parties believe the Stipulation is in the public interest
21 and should be accepted by the Commission as a fair and reasonable resolution of the issues
22 in this proceeding.

- 1 **Q.** **DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?**
- 2 **A.** Yes, it does.

Revised McGee Exhibit 1

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
 CALCULATION OF TOTAL FUEL COMPONENT
 BILLING PERIOD OCTOBER 1, 2018 TO SEPTEMBER 30, 2019

Line No.	Description	Reference	Customer Class		
			Cents / kWh		
			Residential	General / Lighting	Industrial
Base Fuel Costs					
1	Base Fuel Cost Component Under / (Over) at September 2018	Exhibit 2 Page 2	0.3488	0.3488	0.3488
2	Base Fuel Cost Component Projected Billing Period	Exhibit 3	1.6160	1.6160	1.6160
3	Total Base Fuel Cost Component		1.9648	1.9648	1.9648
Capacity Related Costs					
4	PURPA Purchased Power Component Under / (Over) at September 2018	Exhibit 6 Page 1, 2, 3	(0.0136)	0.0004	0.0051
5	Capacity Related Cost Component Projected Billing Period	Exhibit 7	0.1410	0.1154	0.0850
6	Total Capacity Related Cost Component	Line 4 + 5	0.1274	0.1158	0.0901
Distributed Energy Resource Program Avoided Costs					
7	DERP Avoided Costs Component Under / (Over) at September 2018	Exhibit 12 Page 1,2,3	0.0001	0.0001	0.0001
8	DERP Avoided Costs Component Projected Billing Period	Exhibit 13	0.0005	0.0004	0.0003
9	Total DERP Avoided Costs Component	Line 7 + 8	0.0006	0.0005	0.0004
Environmental Costs					
10	Environmental Component Under / (Over) at September 2018	Exhibit 4 Page 1, 2, 3	(0.0141)	(0.0058)	(0.0017)
11	Environmental Component Projected Billing Period	Exhibit 5	0.0307	0.0251	0.0185
12	Total Environmental Component	Line 10 + 11	0.0166	0.0193	0.0168
Sum Line 3 + Line 6 + Line 9 + Line 12			2.1094	2.1004	2.0721
13	Total Fuel Cost Factor				

Distributed Energy Resource Program Incremental Cost per Account

			General		
			Residential	Service	Industrial
DERP Incremental Under / (Over) at September 2018					
14	Annual Charge / (Credit)	Exhibit 9	\$ 1.36	\$ 6.50	\$ 368.42
15	Monthly Charge / (Credit)	Exhibit 9	\$ 0.11	\$ 0.54	\$ 30.70
DERP Incremental Projected Billing Period					
16	Annual Charge	Exhibit 11	\$ 9.37	\$ 44.85	\$ 2,540.54
17	Monthly Charge	Exhibit 11	\$ 0.78	\$ 3.74	\$ 211.71
18	Total DERP Annual Charge - excluding GRT	Line 14 + Line 16	\$ 10.73	\$ 51.36	\$ 1,200.00
19	Total DERP Monthly Charge - excluding GRT	Line 15 + Line 17	\$ 0.89	\$ 4.28	\$ 100.00
20	Total DERP Annual Charge per account CAP		\$ 12.00	\$ 120.00	\$ 1,200.00
21	Total DERP Annual Charge - including GRT	Line 18 / (1-Tax Rate)	\$ 10.78	\$ 51.59	\$ 1,200.00
22	Total DERP Monthly Charge - including GRT	Line 19 / (1-Tax Rate)	\$ 0.89	\$ 4.30	\$ 100.00

Totals may not sum due to rounding

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PROJECTED BILLING PERIOD BASE FUEL COSTS
FOR THE 12 MONTHS OCTOBER 1, 2018 TO SEPTEMBER 30, 2019

Line No.	Description	Reference	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019
1	Coal		\$ 34,109,050	\$ 25,149,321	\$ 55,843,922	\$ 91,103,980	\$ 75,406,386	\$ 33,729,731
2	Gas		31,311,476	44,439,199	39,182,746	24,291,241	19,899,465	33,616,653
3	Nuclear Fuel		19,891,450	20,204,793	22,719,190	25,684,279	23,106,062	24,029,662
4	Purchased Power		25,794,672	29,721,032	21,480,788	9,044,165	9,786,212	20,956,831
5	Fuel Expense Recovered Through Intersystem Sales		(295,417)	(247,602)	(1,207,492)	(8,994,499)	(8,626,075)	(3,902,743)
6	Total Fuel Costs	Sum Lines 1 through 5	\$ 110,811,232	\$ 119,266,744	\$ 138,019,154	\$ 141,129,166	\$ 119,572,048	\$ 108,430,133
7	Eliminate Avoided Fuel Benefit of SC NEM		348,743	339,036	333,756	351,058	360,768	380,392
8	Adjusted System Fuel costs	Line 6 + Line 7	\$ 111,159,975	\$ 119,605,780	\$ 138,352,910	\$ 141,480,223	\$ 119,932,816	\$ 108,810,525
9	Total Projected System Sales kwhs (w/solar)		6,499,954,760	6,602,598,785	7,160,709,598	8,082,286,102	7,579,000,897	6,739,338,881
10	Eliminate NEM Solar Generation kwhs		10,733,007	10,434,299	10,271,828	10,804,371	11,103,277	11,707,350
11	Adjusted Projected System kwh Sales(w/o solar)	Line 9 + Line 10	6,510,687,766	6,613,033,084	7,170,981,426	8,093,090,473	7,590,104,174	6,751,046,231
12	System Cost per kwh (c/kwh)	Line 8 / Line 11 * 100	1.7073	1.8086	1.9293	1.7482	1.5801	1.6118
13	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,653,194,426	1,656,272,755	1,730,095,930	1,941,621,831	1,890,160,429	1,701,479,433
14	SC Base Fuel Costs	Line 13 * Line 12 / 100	\$ 28,225,751	\$ 29,955,966	\$ 33,379,504	\$ 33,942,669	\$ 29,866,818	\$ 27,423,730
15	Assign 100% of Avoided Fuel Benefit of SC NEM ^(Note 1)		(149,350)	(145,226)	(142,984)	(150,461)	(154,686)	(163,194)
16	Adjusted SC Base Fuel Costs	Line 14 + Line 15	\$ 28,076,400	\$ 29,810,740	\$ 33,236,521	\$ 33,792,208	\$ 29,712,132	\$ 27,260,537

Line No.	Description	Reference	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	12 Month Total
17	Coal		\$ 22,849,825	\$ 18,858,698	\$ 46,565,021	\$ 65,745,180	\$ 54,524,729	\$ 27,095,789	\$ 550,981,631
18	Gas		35,846,443	45,349,136	50,924,788	53,479,451	51,824,581	47,647,266	477,812,446
19	Nuclear Fuel		20,763,903	24,723,353	23,891,329	24,488,031	25,048,343	21,132,678	275,683,073
20	Purchased Power		24,889,788	24,766,503	28,218,162	27,410,873	22,338,548	25,990,419	270,397,992
21	Fuel Expense Recovered Through Intersystem Sales		(341,054)	(765,418)	(687,729)	(2,096,778)	(1,884,871)	(776,137)	(29,825,816)
22	Total Fuel Costs	Sum Lines 17 through 22	\$ 104,008,905	\$ 112,932,271	\$ 148,911,571	\$ 169,026,757	\$ 151,851,330	\$ 121,090,015	\$ 1,545,049,326
23	Eliminate Avoided Fuel Benefit of SC NEM		401,305	400,432	403,097	397,503	386,661	378,751	4,481,502
24	Adjusted System Fuel costs	Line 22 + Line 23	\$ 104,410,210	\$ 113,332,703	\$ 149,314,668	\$ 169,424,260	\$ 152,237,991	\$ 121,468,766	\$ 1,549,530,828
25	Total Projected System Sales kwhs (w/solar)		6,290,451,974	6,684,011,828	7,271,666,889	8,039,482,276	8,522,431,399	7,846,096,714	87,318,030,105
26	Eliminate NEM Solar Generation kwhs		12,351,069	12,324,187	12,406,205	12,234,038	11,900,312	11,656,847	137,926,790
27	Adjusted Projected System kwh Sales(w/o solar)	Line 25 + Line 26	6,302,803,043	6,696,336,016	7,284,073,094	8,051,716,314	8,534,331,711	7,857,753,561	87,455,956,895
28	System Cost per kwh (c/kwh)	Line 24 / Line 27 *100	1.6566	1.6925	2.0499	2.1042	1.7838	1.5458	1.7718
29	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,617,313,962	1,708,606,495	1,838,390,333	1,977,673,029	2,114,032,235	1,985,123,379	21,813,964,237
30	SC Base Fuel Costs	Line 28 * Line 29 / 100	\$ 26,791,903	\$ 28,917,455	\$ 37,684,773	\$ 41,614,207	\$ 37,710,747	\$ 30,686,950	\$ 386,200,473
31	Assign 100% of Avoided Fuel Benefit of SC NEM ^(Note 1)		(172,230)	(171,852)	(173,003)	(170,586)	(165,902)	(162,484)	(1,921,959)
32	Adjusted SC Base Fuel Costs	Line 30 + Line 31	\$ 26,619,673	\$ 28,745,602	\$ 37,511,770	\$ 41,443,621	\$ 37,544,844	\$ 30,524,465	\$ 384,278,514
33	Adjustment to defer recovery of fuel cost over 2 years								\$ (34,000,000)
34	Adjusted Total SC Base Fuel Costs	Line 32 + Line 33							\$ 350,278,514
Projected SC Retail Sales kWh (October 2018 - September 2019)									
35	Residential								6,580,779,714
36	General Service/Lighting								5,838,912,144
37	Industrial								9,256,345,589
38	Total SC	Sum Lines 35 through 37							21,676,037,448
39	SC Base Fuel Rate (cents / kWh)	Line 34 / Line 38 * 100							1.6160

Note 1 - Equals total NEM avoided fuel benefit less portion included in DERP NEM Incentive.

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
ACTUAL AND ESTIMATED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL
FOR THE PERIOD JUNE 2017 - SEPTEMBER 2018

		Total Incremental Costs
1 Cumulative SC DERP Incremental (Over)/ Under Recovery	Exhibit 8 Line 40	\$ 1,724,810

Allocation of DERP Incremental Costs for October 2018 - September 2019	Firm Peak Demand - 2017	Total Incremental Costs	Cost Allocated per Firm Peak Demand
2 Residential	38.84%		\$ 669,940
3 General	28.22%		486,766
4 Industrial	32.94%		568,105
5 Total	100.00%	\$ 1,724,810	\$ 1,724,810

	Total Cost Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	\$ per Account per Year	\$ per Account per Month
6 Residential	\$ 669,940	492,980	\$ 1.36	\$ 0.11
7 General	486,766	74,833	\$ 6.50	\$ 0.54
8 Industrial	568,105	1,542	\$ 368.42	\$ 30.70
9 Total	\$ 1,724,810	569,355		

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PROJECTED BILLING PERIOD INCREMENTAL COSTS FACTORS FOR DERP COSTS
FOR THE BILLING PERIOD OCTOBER 2018 - SEPTEMBER 2019

		Total Incremental Costs
1 Total DERP Projected Incremental Costs	Exhibit 10 Line 21	\$ 11,893,858

Allocation of DERP Incremental Costs for October 2018 - September 2019	Firm Peak Demand - 2017	Total Incremental Costs	Cost Allocated per Firm Peak Demand
2 Residential	38.84%		\$ 4,619,734
3 General	28.22%		3,356,615
4 Industrial	32.94%		3,917,509
5 Total	100.00%	\$ 11,893,858	\$ 11,893,858

	Total Cost Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	\$ per Account per Year	\$ per Account per Month
6 Residential	\$ 4,619,734	492,980	\$ 9.37	\$ 0.78
7 General	3,356,615	74,833	\$ 44.85	\$ 3.74
8 Industrial	3,917,509	1,542	\$ 2,540.54	\$ 211.71
9 Total	\$ 11,893,858	569,355		